NHDOT Comments 4/26/2016

General Comments

- 1. The Right-of-Way type shall be shown on the plans to help identify the type of road being impacted by the project.
- 2. All existing aerial and underground (water, sewer, gas, etc.) utilities need to be shown on the plans. All NHDOT facilities should be shown as well.
- 3. Bridge structures shall be shown on the plans for the Department to evaluate if the alignment of the proposed transmission facility is appropriate. Proposed lines shall not pass over, under or in close proximity bridge structures. Abutment and piers shall be shown on the plan and profiles.
- 4. The clearing limits should be shown on the plans.
- 5. All waterways shown on the plans should be labeled.
- 6. Where railroads are on the plans the railroad ROW should be shown. The track name should be included on the plans. As well as the Owner and Operator.

Aerial Crossing Comments

- The road crossing spreadsheet should have a column indicating the Town that the road crossing is located within. This would make it easier for locating specific crossings.
- 2. The Eversource easement width should be shown along with the clearing width dimension. This information will help to recognize the full potential clearing limits if the full easement was not already cleared.
- 3. Diamond Pond Road is a District 1 maintained road in the summer but winter maintained by the Town. Should the packet include maintenance responsibilities for permitting purposes?
- 4. Christine Lake Road is shown on "NH Roads" as "NM" under winter maintenance and doesn't have a plow level associated. Eversource should be made aware that they are responsible to plow Christine Lake Road in order to access the transmission facility in this location.
- 5. The DC 467 line crossing Lost Nation Road in Northumberland is shown outside the NHDOT ROW as well as outside the Eversource easement.
- 6. What is the significance of the temperatures shown on the crossing facilities?
- 7. The individual crossing drawings need to clearly show which facilities are existing, proposed or existing but being relocated.
- 8. Profile drawings shall include the existing aerial facilities along the roadway.
- 9. The aerial crossing at 5806 has a pole proposed outside the ROW and outside the easement. The NHDOT only provides approval/denial of facilities proposed within the ROW, therefore crossings that are approved with poles outside PSNH easements and NHDOT ROW, are only approving the crossings within the ROW.

- 10. PSNH easements should not be shown through NHDOT ROW unless the easements preceded the Department and the Department did not purchase the easement rights.
- 11. Loudon Road is listed in the Patrol Shed Maintenance maps as being owned and maintained by the City of Concord.

Underground Comments

- 1. Survey Notes #7 identifies the ROW as approximate. As noted above, the ROW needs to be accurate in order to approve location of the proposed facility.
- 2. General Note #3 should be evaluated to consider future road/drainage improvements and be placed deeper to reduce the risk of relocation due to infrastructure repair and/or improvements. NHDOT rules specify that facilities installed using directional drilling methods across primary roads require a minimum of 10 feet below roadway grade and when on secondary roads the requirement is 5 feet; the 5 foot depth requirements applies to primary and secondary roads when traditional trenching methods are implemented. Minimum depth requirements are to the nearest point of the installed facility, i.e. concrete encasement, vault, conduit etc.
- 3. Should General Note #4 include drainage as well?
- 4. General Note #9 needs to be modified to comply to the UAM requirements: 30" below ground and 48" below ditch line elevation.
- 5. Does General Note #10 include longitudinal open trenches?
- General Note #11 specifies that the Contractor is to only field verify all "gravity fed utilities". The Contractor is responsible to verify all utilities not just gravity fed ones.
- 7. General Note #15 indicates that, "Culverts not requiring trenchless crossings are not shown." All culvert crossings are required to be shown on the plans regardless of installation methods of the proposed facility.
- 8. The plans should include Town and State maintenance lines.
- 9. To reduce the risk of relocation in the future, especially around bridges, the proposed facility should be as near to the ROW as possible.
- 10. UAM VIII.A.1 identifies that a utility facility needs to be in a location that minimizes the need for future adjustment and has minimal interference with highway traffic.
- 11. Underground facilities, other than crossings, should be placed outside the existing pavement. Refer to UAM VIII.A.2 for further details.
- 12. Sheet NRTHC100 shows N Hill RD starting at the Clarksville/Stewartstown Town line and runs all the way to Bear Rock Road. Information researched indicates that Old County Road runs from NH 145 in Clarksville to Cream Poke Road in Stewartstown to where N Hill Road begins at Cream Poke Road.

- 13. A list of State roads, with lengths, that are required to be rebuilt with surface material, gravel or asphalt, should be included. Should existing drainage be reviewed and possibly replaced/improved at the same time of NP construction as to not cut into a potentially newly reconstructed road?
- 14. Encasement under the facility when crossing above drainage culverts. Intent would be to provide future support and minimize the risk of relocation when the culverts are replaced/repaired.
- 15. Are the vaults a single structure or assembled onsite and installed? Is a crane required to install the facility or excavators acceptable? Some vault locations appear to be proposed under existing aerial facilities. Any temporary or permanent relocations of existing facilities should be shown on the plans.
- 16. When excavating in proximity of existing or past fuel sites, manufacturing sites, etc., coordination through NHDES is necessary to evaluate the potential of contaminated soils being encountered during construction.
- 17. Confirm ROW widths. Spot checks result in identifying ROW to be wider than shown on the plans, resulting in more area for the underground to be installed outside the existing pavement that the plans show. Confirm the roadway alignments within the ROW as the plans show the alignment of the roadway to vary throughout the RW limits.
- 18. ROW needs to be shown correctly when intersecting other roadways.
- 19. Properties should be referenced, whether by owners or street addresses. This aids in quickly identifying a specific location on the plans for satellite imagery review.
- 20. Refer to UAM section IX.A.3.a for trenchless technology requirements. Boring and receiving pits, estimated at 20'x20'x60' shall be shown on the plans to evaluate impacts to traffic. Construction influence areas, including layout space, should be shown on the plans.
- 21. Boring pit locations shall not be in the middle of intersections as seen at the NH 18/NH 116 intersection as the construction operation will effectively shut down traffic. The abutting properties on NH 116 adjacent to the river have ample open space for temporary construction activities which seems more practical than shutting down the intersection to traffic.
- 22. Boring paths are impractical when proposed under existing bridge abutments. Bores should be as far away from bridge structures to minimize the need for relocation.
- 23. Are boring operations intended to be non-stop until completion of the directionally drilled sections? Details shall be included if pits are to remain open overnight or over the weekend.
- 24. Past project information for NH 116 starting around Academy Road shows a waterline in the same approximate locations as the current alignment. The ROW also appears to shrink to just behind the sidewalk on the east side and at the utility poles on the west side.

- 25. Cable and beam guardrail shall be shown to evaluate the scheduling of replacement. An example would be not to have a project go out to replace/improve the guardrail and then replaced again because NP takes it all down and has to replace it.
- 26. FairPoint Communications maintains a fiber optic facility along NH 112. This facility needs to be shown on the plans.
- 27. Is NH 112 a scenic and heavily tourist traveled road? Should traffic requirements be included into the U&O to require 2 lanes of traffic open at all times?
- 28. Wetland limits are shown crossing the roadway with no structures shown. All bridges and culverts shall be shown on the plans and cross-sections.
- 29. Longitudinal road crossings should be minimized.
- 30. Splice vault shown on WBR3C 192, approximately station 789+00, is shown on the west side of US 3 between the I-93 overpasses. The proposed location is at the tow of slope and substantial work may be required to maintain the slopes for such a large proposed excavation.
- 31. The current route through Plymouth on US 3 from approximately Tobey Road to Warren Street is a route containing a vast amount of utility facilities and obstructions; i.e. multiple underground telecommunications, water, sewer, power facilities, drainage, aerial facilities, fences, curbing, parking spaces, as well as heavy vehicle and pedestrian traffic loads. Has another route using the rail corridor, etc. been reviewed to avoid such site conditions which will both increase construction time and costs?
- 32. Ledge limits should be shown on the plan and profile.
- 33. Historic properties should be identified on the plans, which may require monitoring to prevent damage during construction.
- 34. Vault locations shall be proposed in a location to minimize the impact to traffic during construction and maintenance. The vault proposed in the vicinity of 1215+20 appears to impact the properties 2 drive entrances during both construction and maintenance.
- 35. The Trench Crossing detail calls for "thermally approved backfill or approved native soil backfill." Where is the detail located of what qualifies for "thermally approved backfill?" Details should identify that backfill will meet or exceed the requirements of the NHDOT Standard Specifications for Road and Bridge Construction for backfill.